

**REMARKS**

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-10, 12-16, and 18-32 are pending.

**Amendment to the Claims**

Claims 1-10, 12-16, and 18-32 have been examined with no claims being allowed. Claims 1, 14, and 17 have been amended herein. Claims 2 and 30 have been canceled. No new matter has been added by this Amendment.

Applicants have amended Claims 1, 14, and 27 to include the limitation of a pattern width of at least 0.21 inch. Support for this amendment is provided at page 10, lines 9-10, and in the Example at page 13, lines 20-22, and at page 15, lines 3-6, of the specification.

Applicants have further amended Claims 1 and 27 to include the limitation of adjacent bond points in each row being at a distance between about 0.001 inch and about 0.20 inch from one another. Support for this amendment is provided in Claims 2 and 30. Thus, Applicants request cancellation of Claims 2 and 30.

Applicants have further amended Claim 1 pursuant to the Examiner's suggestion.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims has been reduced.

**Claim Objections**

Applicants have amended Claim 1 to include the word "is" between "rows" and "equally" in line 7, as recommended by the Examiner.

**Claim Rejections - 35 U.S.C. §103**

The rejection of Claims 1-10, 12-16, and 18-32 under 35 U.S.C. §103(a) as being unpatentable over Bridges et al. (U.S. Patent 5,624,420, hereinafter "Bridges") in view of EP 0 677 284 (hereinafter "EP '284") is respectfully traversed, particularly in view of the above Amendment and the following remarks.

Bridges discloses a disposable undergarment having non-perforated tear lines for removing the garment from a wearer. The non-perforated tear lines include individual bond sites that are sized, shaped, spaced, and arranged geometrically to provide a desired line of weakness. The bond sites are thinned and resolidified membranes, which create a weakened zone.

EP '284 discloses containment flap constructions that include an elastic member located between two layers of heat-fusible material with a pattern of thermal bonds joining the two layers together.

Applicants' invention as claimed in independent Claims 1, 14, and 27 requires at least three parallel rows of bond points having a pattern width of at least 0.21 inch, at least one of the bond points in each of the rows equally spaced apart from at least three other bond points such that each bond point is within about 0.001 inch to about 0.20 inch of at least one other bond point, the bond points in adjacent rows offset from one another.

As illustrated in the Example on page 13, line 7 – page 15, lines 6, of the specification of the present application, a point bond section having a relatively short machine direction spacing (i.e., such that each bond point is within about 0.001 inch to about 0.20 inch of at least one other bond point) and a relatively large pattern width (i.e., at least 0.21 inch) provides protection against leakage. Neither Bridges nor EP '284 discloses or suggests a pattern of thermal bonds having bond points that are spaced relatively close to one another with a relatively large pattern width.

Bridges discloses, at most, three parallel rows of bond points (Figs. 1E and 1F), but each row does not include at least one bond point that is equally spaced apart from at least three other bond points because the outer two rows have twice the distance between bond points as the inner row. Thus, each of the bond points in each of the outer rows is only equally spaced apart from two other bond points and no

single bond point is equally spaced apart from at least three other bond points. As pointed out by the Examiner, Bridges discloses bond points having a diameter of about 0.05 inches and spaced about 0.01 inches from each other. Thus, a configuration of, at most, three rows of bond points having the dimensions disclosed in Bridges would consequently have a pattern width smaller than 0.21 inch.

Contrary to the present invention, the purpose of Bridges is to use ultrasonic bonding to create lines of *weak membranes* such that a garment can be torn apart along the weak membranes. The present invention, in contrast, is directed to an ultrasonic bond pattern that creates a considerably strong bond between two or more substrates with a *reduced likelihood of tearing* or unbonding compared to a continuous ultrasonic bond, and with the added feature of *preventing leakage* through the pattern of bonds.

EP '284 discloses four parallel rows of bond points. However, EP '284 fails to disclose any ranges of distances between the bond points, or an overall pattern width of the bond pattern. More particularly, EP '284 fails to disclose a distance within about 0.001 inch to about 0.20 inch between adjacent bond points or a pattern width of at least 0.21 inch. Instead, EP '284 suggests that the second pattern of thermal bonds, namely the bonds located between the elastic member and the proximal edge, may be spaced relatively far apart because it is not entirely critical to prevent the elastic member from passing outside the second pattern of thermal bonds (Col. 10, lines 20-30). In contrast, as mentioned, the purpose of the present invention is to provide an ultrasonic bond pattern that creates a strong bond and prevents leakage through the pattern of bonds. Unlike in EP '284, the bond points in the present invention must be spaced relatively close together.

Moreover, there is no suggestion to combine the teachings of Bridges with the teachings of EP '284. Bridges is directed to a garment having tearable seams in a zone of weakness created by thermal bonds in lieu of perforations. EP '284, on the other hand, is directed to containment flaps that have thermal bonds in lieu of adhesive bonds. Thus, the combined teachings of Bridges and EP '284 would not lead a person skilled in the art to develop an improved leak-proof seal, particularly not

the leak-proof seal having the configuration recited in the present invention, since neither Bridges nor EP '284 discloses or suggests any type of leak-proof seal.

Furthermore, since Bridges suggests that ultrasonic bonds can be used to form a zone of weakness, the use of a discontinuous bond pattern to create strong, leak-proof seams, as recited in the present invention, is therefore completely non-obvious in view of Bridges.

For at least the reasons given above, Applicants respectfully submit that the teachings of Bridges in view of EP '284 fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

#### **Conclusion**

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



Melanie I. Rauch  
Registration No. 40,924

Pauley Petersen Kinne & Erickson  
2800 West Higgins Road, Suite 365  
Hoffman Estates, Illinois 60195  
(847) 490-1400  
FAX (847) 490-1403